

## AMENDMENT

Please Amend the Claims as follows:

1. (Previously Cancelled)
2. (Currently Amended) An adhesive suitable to provide a bond between components, comprising:
  - an adhering material suitable for holding a first surface and a second surface in contact; and
  - a plurality of items disposed in the adhering material, the plurality of items having electromagnetic capability (EMC) shielding characteristics, wherein an item of the plurality of items includes ~~at least one of a~~ ceramic ferromagnetic material <sup>(col. 56-57)</sup> and a magnetic shielding alloy.
3. (Original) The adhesive as described in claim 2, wherein the ceramic ferromagnetic material includes ferrite.
4. (Previously Amended) The adhesive as described in claim 2, wherein a quantity of the plurality of items disposed in the adhering material is sufficient to provide EMC shielding between the first surface and the second surface.
5. (Previously Amended) The adhesive as described in claim 2, wherein the first surface is included on an integrated circuit and the second surface is included on a heat sink.
6. (Previously Amended) The adhesive as described in claim 2, wherein items of the plurality of items are shaped to include at least one of a disk, sliver, hexagonal, triangular, parallelogram, oval, diamond, polyhedral and polymorphic.

7. (Currently Amended) An adhesive suitable to provide a bond between components, comprising:

an adhering material suitable for holding a first surface and a second surface in contact; and

a plurality of items disposed in the adhering material, the plurality of items having electromagnetic capability (EMC) shielding characteristics, wherein an item of the plurality of items includes a ceramic ferromagnetic material and a magnetic shielding alloy and is formed wherein a longest dimension of the item is at least one of equal to and less than one-half of a distance between the first surface and the second surface.

8. (Original) The adhesive as described in claim 7, wherein an item of the plurality of items is formed wherein a longest dimension of the item is at least one of equal to and greater than one-quarter of a distance between the first surface and the second surface.

9. (Currently Amended) The adhesive as described in claim 7, wherein an item of the plurality of items is formed wherein a longest dimension of the item is at least one of equal to and ~~greater~~ less than one-quarter of a distance between the first surface and the second surface.

10. (Currently Amended) An adhesive suitable to provide a bond between components, comprising:

an adhering material suitable for holding a first surface and a second surface in contact; and

a plurality of items disposed in the adhering material, the plurality of items having electromagnetic capability (EMC) shielding characteristics, wherein an item of the plurality of items includes a ceramic ferromagnetic material and a magnetic shielding alloy and is formed wherein a smallest dimension of the item is at least one of equal to and less than one-tenth of a distance between the first surface and the second surface.

11. (Currently Amended) An adhesive suitable to provide a bond between components, comprising:

an adhering material suitable for holding a first surface and a second surface in contact; and

a plurality of items disposed in the adhering material, the plurality of items having electromagnetic capability (EMC) shielding characteristics, wherein an item of the plurality of items includes a ceramic ferromagnetic material and a magnetic shielding alloy and is formed wherein a midpoint width of the item is at least one of equal to and less than one-quarter of a distance between the first surface and the second surface.

12. (Cancelled)

13. (Currently Amended) An electrical system, comprising:

a first electrical component suitable for providing a function, the first electrical component including a first surface;

a second component suitable for providing a function, the second component including a second surface;

an adhering material suitable for holding the first surface of the first electrical component and a second surface of the second component in contact; and

a plurality of items disposed in the adhering material, the plurality of items having electromagnetic capability (EMC) shielding characteristics, wherein an item of the plurality of items includes ~~at least one of~~ a ceramic ferromagnetic material and a magnetic shielding alloy.

14. (Original) The electrical system as described in claim 13, wherein the ceramic ferromagnetic material includes ferrite.

15. (Previously Amended) The electrical system as described in claim 13, wherein a quantity of the plurality of items disposed in the adhering material is sufficient to provide EMC shielding between the first electrical component and the heat sink.

16. (Previously Amended) The electrical system as described in claim 13, wherein the first electrical component is an integrated circuit and the second component is a heat sink.

17. (Previously Amended) The electrical system as described in claim 13, wherein items of the plurality of items are shaped to include at least one of a disk, sliver, hexagonal, triangular, parallelogram, oval, diamond, polyhedral and polymorphic.

18. (Currently Amended) An electrical system, comprising:

a first electrical component suitable for providing a function, the first electrical component including a first surface;

a second component suitable for providing a function, the second component including a second surface;

an adhering material suitable for holding the first surface of the first electrical component and a second surface of the second component in contact; and

a plurality of items disposed in the adhering material, the plurality of items having electromagnetic capability (EMC) shielding characteristics, wherein an item of the plurality of items includes a ceramic ferromagnetic material and a magnetic shielding alloy and is formed wherein a longest dimension of the item is at least one of equal to and less than one-half of a distance between the first surface and the second surface.

19. (Original) The electrical system of claim 18, wherein an item of the plurality of items is formed wherein a longest dimension of the item is at least one of equal to and greater than one-quarter of a distance between the first surface and the second surface.

20. (Original) The electrical system of claim 18, wherein an item of the plurality of items is formed wherein a longest dimension of the item is at least one of equal to and greater than one-tenth of a distance between the first surface and the second surface.

21. (Currently Amended) An electrical system, comprising:

a first electrical component suitable for providing a function, the first electrical component including a first surface;

a second component suitable for providing a function, the second component including a second surface;

an adhering material suitable for holding the first surface of the first electrical component and a second surface of the second component in contact; and

a plurality of items disposed in the adhering material, the plurality of items having electromagnetic capability (EMC) shielding characteristics, wherein an item of the plurality of items includes a ceramic ferromagnetic material and a magnetic shielding alloy and is formed wherein a smallest dimension of the item is at least one of equal to and less than one-tenth of a distance between the first surface and the second surface.

22. (Currently Amended) An electrical system, comprising:

a first electrical component suitable for providing a function, the first electrical component including a first surface;

a second component suitable for providing a function, the second component including a second surface;

an adhering material suitable for holding the first surface of the first electrical component and a second surface of the second component in contact; and

a plurality of items disposed in the adhering material, the plurality of items having electromagnetic capability (EMC) shielding characteristics, wherein an item of the plurality of items includes a ceramic ferromagnetic material and a magnetic shielding alloy and is formed wherein a midpoint width of the item is at least one of equal to and less than one-quarter of a distance between the first surface and the second surface.

23. (Currently Amended) An electrical system, comprising:

a first electrical component suitable for providing a function, the electrical component including a first surface;

a second component including a second surface;

a carrier material disposed between the first electrical component and the second component; and

a plurality of items disposed in the carrier material, the plurality of items having electromagnetic capability (EMC) shielding characteristics, wherein an item of the plurality of items includes ~~at least one of~~ a ceramic ferromagnetic material and a magnetic shielding alloy.

24. (Original) The electrical system as described in claim 23, wherein the plurality of items are formed having a length between 3 microns and 1 millimeter.

25. (Original) The electrical system as described in claim 23, wherein the carrier material is thermally conductive.

Please add the following new claims:

26. (New) An adhesive<sup>552</sup> suitable to provide a bond<sup>(556)</sup> between components, comprising:  
an adhering material<sup>552</sup> suitable for holding a first surface and a second surface in contact; and

a plurality of items<sup>554</sup> disposed in the adhering material, the plurality of items<sup>556</sup> having electromagnetic capability (EMC) shielding characteristics<sup>554</sup>, wherein an item of the plurality of items<sup>554</sup> includes a magnetic shielding alloy. (see Fig 6.)  
(Col. 11, line 12, 44-57)

27. (New) The adhesive as described in claim 26, wherein the magnetic shielding alloy includes Mu metals.

28. (New) The adhesive as described in claim 26, wherein a quantity of the plurality of items disposed in the adhering material is sufficient to provide EMC shielding between the first surface and the second surface.

29. (New) The adhesive as described in claim 26, wherein the first surface is included on an integrated circuit and the second surface is included on a heat sink.

30. (New) The adhesive as described in claim 26, wherein items of the plurality of items are shaped to include at least one of a disk, sliver, hexagonal, triangular, parallelogram, oval, diamond, polyhedral, and polymorphic.

31. (New) An adhesive suitable to provide a bond between components, comprising:  
an adhering material suitable for holding a first surface and a second surface in contact; and

a plurality of items disposed in the adhering material, the plurality of items having electromagnetic capability (EMC) shielding characteristics, wherein an item of the plurality of items includes a magnetic shielding alloy and is formed wherein a longest dimension of the item is at least one of equal to and less than one-half of a distance between the first surface and the second surface.

32. (New) The adhesive as described in claim 31, wherein an item of the plurality of items is formed wherein a longest dimension of the item is at least one of equal to and greater than one-quarter of a distance between the first surface and the second surface.

33. (New) The adhesive as described in claim 31, wherein an item of the plurality of items is formed wherein a longest dimension of the item is at least one of equal to and greater than one-quarter of a distance between the first surface and the second surface.

34. (New) The adhesive as described in claim 31, wherein an item of the plurality of items is formed wherein a smallest dimension of the item is at least one of equal to and less than one-tenth of a distance between the first surface and the second surface.

35. (New) The adhesive as described in claim 31, wherein an item of the plurality of items is formed wherein a midpoint width of the item is at least one of equal to and less than one-quarter of a distance between the first surface and the second surface.

36. (New) An electrical system, comprising:

a first electrical component suitable for providing a function, the first electrical component including a first surface;

a second component suitable for providing a function, the second component including a second surface;

an adhering material suitable for holding the first surface of the first electrical component and a second surface of the second component in contact; and

a plurality of items disposed in the adhering material, the plurality of items having electromagnetic capability (EMC) shielding characteristics, wherein an item of the plurality of items includes a magnetic shielding alloy.

37. (New) The electrical system as described in claim 36, wherein the magnetic shielding alloy includes Mu metals.

38. (New) The electrical system as described in claim 36, wherein a quantity of the plurality of items disposed in the adhering material is sufficient to provide EMC shielding between the first electrical component and the second component configured as a heat sink.

39. (New) The electrical system as described in claim 36, wherein the first electrical component is an integrated circuit and the second component is a heat sink.

40. (New) The electrical system as described in claim 36, wherein items of the plurality of items are shaped to include at least one of a disk, sliver, hexagonal, triangular, parallelogram, oval, diamond, polyhedral, and polymorphic.

41. (New) An electrical system, comprising:

a first electrical component suitable for providing a function, the first electrical component including a first surface;

a second component suitable for providing a function, the second component including a second surface;



an adhering material suitable for holding the first surface of the first electrical component and a second surface of the second component in contact; and

a plurality of items disposed in the adhering material, the plurality of items having electromagnetic capability (EMC) shielding characteristics, wherein an item of the plurality of items includes a magnetic shielding alloy and is formed wherein a longest dimension of the item is at least one of equal to and less than one-half of a distance between the first surface and the second surface.

42. (New) The electrical system as described in claim 41, wherein an item of the plurality of items is formed wherein a longest dimension of the item is at least one of equal to and greater than one-quarter of a distance between the first surface and the second surface.

43. (New) The electrical system as described in claim 41, wherein an item of the plurality of items is formed wherein a smallest dimension of the item is at least one of equal to and less than one-tenth of a distance between the first surface and the second surface.

44. (New) The electrical system as described in claim 41, wherein an item of the plurality of items is formed wherein a smallest dimension of the item is at least one of equal to and less than one-tenth of a distance between the first surface and the second surface.

45. (New) The electrical system as described in claim 41, wherein an item of the plurality of items is formed wherein a midpoint width of the item is at least one of equal to and less than one-quarter of a distance between the first surface and the second surface.

46. (New) An electrical system, comprising:

a first electrical component suitable for providing a function, the electrical component including a first surface;

a second component including a second surface;

a carrier material disposed between the first electrical component and the second component; and

a plurality of items disposed in the carrier material, the plurality of items having electromagnetic capability (EMC) shielding characteristics, wherein an item of the plurality of items includes a magnetic shielding alloy.

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47. (New) The electrical system as described in claim 46, wherein the plurality of items are formed having a length between 3 microns and 1 millimeter.

48. (New) The electrical system as described in claim 46, wherein the carrier material is thermally conductive.

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